

WE CLAIM:

1. A script management system comprising:
 - a. a script repository retrievably storing a plurality of parameterized command script templates, at least one command specification constituent of a command script template specifies a user parameter identifier; and
 - b. managed entity configuration management module populating parameterized command script templates in deriving corresponding command scripts.
2. The script management system claimed in claim 1, wherein at least one command constituent of the command script template further specifies a user parameter identifier the script management system further comprising a managed entity configuration human-machine interface for: entering a user parameter value for the user parameter identifier, saving the user parameter value with a repository, optionally requesting the user parameter value from repository, optionally retrieving the user parameter value from the repository, optionally editing the user parameter value, and optionally deleting the user parameter value.
3. The script management system claimed in claim 2, wherein the command script template is stored in the script repository along with a command script template version identifier, user parameter values corresponding to command specifications constituent of the command script template are stored in a user parameter set having a user parameter set version identifier; the script management system further comprising a versioning module inspecting the command script template version identifier and the user parameter set version identifier to ensure correspondence therebetween.
4. The script management system claimed in claim 3, the managed entity configuration management module further comprising means for requesting additional user parameter values to be entered via the managed entity configuration human-machine interface when discrepancies arise between a command script template version identifier and a user parameter set identifier.

5. The script management system claimed in claim 1, wherein at least one command constituent of the command script template further specifies a network management system parameter identifier, the managed entity configuration management module further comprising means for obtaining a corresponding managed entity parameter value from one of a network management system and an network management system database.

10. The script management system claimed in claim 1 wherein each command script template further comprises an associated script execution dependency specification identifying at least one command script required to be executed in advance thereof, the script management system further comprising: a script sequencer inspecting the script execution dependency specification of at least one command script, the command script being derived from a corresponding command script template, to determine whether an at least one additional command script is required to be executed in advance thereof; the submitted and the additional command scripts representing an apply list of scripts, the script execution dependency specification and the script sequencer enabling the use of specific command script templates in respect of discrete configuration tasks, script execution dependency specified combinations of which specifying complex communications network managed entity configurations tasks.

15. 7. The script management system claimed in claim 6, wherein the script execution dependency specification further comprises a script execution dependency table.

20. 8. The script management system claimed in claim 6, wherein the managed communications network entity configuration management module further submitting sequenced command scripts to at least one target managed communications network entity for execution in configuring thereof.

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9. The script management system claimed in claim 8, further comprising a managed entity configuration human-machine interface including means for: target managed entity selection, command script template selection, and submission of the command script template selection for configuration of the at least one selected target managed entity to the managed communications network entity configuration management module.

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10. The script management system claimed in claim 9, wherein each target managed entity comprises one of: a router, an interface, a routing protocol, an Internet Protocol link.

10 11. The script management system claimed in claim 1, further comprising an analyst human-machine interface including means for: command script template creation, submission of the command script template to the script repository for storage, optional retrieval of the command script template, and optional modification of the command script template.

15 12. The script management system claimed in claim 11, the analyst human-machine interface further including means for parameterized command script template specification in creating thereof.

13. The script management system claimed in claim 11, wherein the command script template creation means provides command script template specification in accordance with one command interface language from: Command Line Interface (CLI), eXtensible Markup Language (XML), Node Management Terminal Interface (NMTI), and Transaction Language 1 (TL1).

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14. The script management system claimed in claim 11, the analyst human-machine interface including means for: script execution dependency specification.

15. The script management system claimed in claim 11, the analyst human-machine interface further including means for: command script execution authorization specification in respect of the command script template.

16. An analyst human-machine interface for communications network managed entity configuration comprising means for: command script template creation, submission of the command script template to a script repository for storage, optional retrieval of the command script template, and optional modification of the command script template.

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17. The analyst human-machine interface claimed in claim 16, further including means for parameterized command script template specification in creating thereof.

18. The analyst human-machine interface claimed in claim 16, further including means for script execution dependency specification in respect of a command script template.

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19. The analyst human-machine interface claimed in claim 16, further including means for command script execution authorization specification in respect of the command script template.

15 20. The analyst human-machine interface claimed in claim 16, wherein command script template creation means provides command script template specification in accordance with one command interface language from: Command Line Interface (CLI), eXtensible Markup Language (XML), Node Management Terminal Interface (NMTI), and Transaction Language 1 (TL1).

20 21. A managed entity configuration human-machine interface comprising means for: command script template selection from a group of command script templates, and for submission of the command script template selection for the configuration of at least one target managed entity.

22. The managed entity configuration human-machine interface claimed in claim 21, wherein command script template specification is parameterized, at least one command constituent of the command script template specifies a user parameter identifier, the managed entity configuration human-machine interface further comprising means for: entering a user parameter value, submitting the user parameter value for storage in a repository, optionally retrieving the user parameter value from the script repository, optionally editing the user parameter value, and optionally deleting the user parameter value.

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23. The managed entity configuration human-machine interface claimed in claim 21, further comprising means for: target managed entity selection from a group of managed communications network entities.

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24. The managed entity configuration human-machine interface claimed in claim 23, wherein each target managed entity comprises one of: a router, an interface, a routing protocol, an Internet Protocol link.

15 25. A recording medium comprising at least one parameterized command script template.

26. The recording medium claimed in claim 25 further comprising a user parameter set.

20 27. The recording medium claimed in claim 26, wherein the parameterized command script template further comprises an associated version specification, and the user parameter set further comprises an associated version specification.

25 28. The recording medium claimed in claim 25, wherein at least one command script template of a plurality of command script templates further comprises a script execution dependency specification specifying another command script derived from one other command script template to be submitted for prior execution.

29. The recording medium claimed in claim 25, wherein the at least one parameterized command script template is specified in accordance with one command interface language from: Command Line Interface (CLI), eXtensible Markup Language (XML), Node Management Terminal Interface (NMTI), and Transaction Language 1 (TL1).

5 30. A method of configuring communications network a managed entity comprising the steps of:

10 a. selecting at least one parameterized script template from a plurality of parameterized script templates based on a configuration task to be performed on the managed entity;

15 b. populating the parameterized command script template with at least one parameter value to derive a command script in respect of the configuration task; and

20 c. submitting the command script to the managed entity for execution.

15 31. The method claimed in claim 30 further comprising the step of retrieving the at least one parameter value from a repository.

20 32. The method claimed in claim 31, wherein retrieving the at least one parameter value from the repository the method further comprises a step of: retrieving a user parameter set including a plurality of user parameter values for the command script template.

25 33. The method claimed in claim 32, wherein populating the command script template further comprising step of:

18 a. determining that a user parameter value is not provided in a user parameter set; and

25 b. prompting a user to enter the missing user parameter value to populate the command script template.

34. The method claimed in claim 33, further comprising a step of storing a versioned user parameter set in a repository.

35. The method claimed in claim 34, wherein each command script template has an associated version specification, and in retrieving the user parameter set the method further comprises steps of:

- comparing the command script template version with the user parameter set version; and
- selectively re-entering a user parameter in the user parameter set if the user parameter has changed.

36. The method claimed in claim 30, further comprising the step of populating the parameterized command script template with at least one network management system parameter value to derive a command script in respect of the configuration task.

37. The method claimed in claim 36, further comprising the step of: retrieving a network management system parameter value.

38. The method claimed in claim 37 further comprising the step of: requesting the network management system parameter value from one of a network management system and a network management system database.

39. The method claimed in claim 30 further comprising the step of retrieving the at least one selected command script template from a script repository.

40. The method claimed in claim 39 wherein selecting more than one command script template, the method further comprises the step of: generating an apply list of command scripts.

41. The method claimed in claim 40, wherein a command script template further includes a script execution dependency specification specifying command scripts required to be executed before the corresponding command script, the method further comprising a step of: ordering the plurality of command script templates in the apply list.

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42. The method claimed in claim 41, further comprising steps of:

- a. determining that a script execution dependency specification specifies a command script not currently a member of the apply list; and
- b. retrieving the corresponding command script template from a script repository for inclusion in the apply list.

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